Application No. 10/522,644 Docket No.: 04393/0202300-US0

Amendment dated June 22, 2009 Reply to Office Action of July 25, 2008

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Canceled)

 (Currently amended) An antibody production method comprising enhancing DNA homologous recombination at an antibody locus when producing antibodies from chicken-derived B

prologous recombination at an antibody locus when producing antibodies from chicken-derived E

cells in which DNA homologous recombination is occurring at the antibody locus, by comprising relaxing with a histone deacetylase inhibitor the chromatin structure of chromosomes in said

chicken-derived B cells, and thereby obtaining diverse a diversity of antibodies.

3. (Withdrawn; currently amended) The method described in Claim 42, wherein the

relaxation of the chromatin structure of chromosomes is induced by putting the cells into contact

with the histone deacetylase inhibitor.

4. (Withdrawn) The method described in Claim 3, wherein the inhibitor is trichostatin A.

5. (Withdrawn; currently amended) The method described in Claim 4, wherein the

treatment concentration of trichostatin A is from approximately 0.5 ng/ml to approximately 5.0

ng/ml, and the contact treatment time is from approximately 2 weeks to approximately 6 weeks.

6. (Withdrawn) The methods described in Claim 1 wherein the cells are DT40 culture cells.

7. (Withdrawn) Immunocytes for which somatic homologous recombination has been

promoted at a genetic locus by the method described in Claim 1.

8. (Withdrawn) Diverse antibodies produced by the method described in Claim 2.

9. (Withdrawn) The antibodies described in Claim 8, wherein the produced antibody

is IgM.

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 (Withdrawn) A medicinal agent for the promotion of somatic homologous recombination at a genetic locus, and comprising a histone deacetylase inhibitor.

11. (Withdrawn) The medicinal agent described in Claim 10, wherein the inhibitor is trichostatin A

## 12. (Canceled)

- (Currently amended) The method described in Claim 3 2, wherein the inhibitor is trichostatin A.
- 14. (Currently amended) The method described in Claim 13, wherein the treatment concentration of trichostatin A is from approximately 0.5 ng/ml to approximately 5.0 ng/ml, and the contact treatment time is from approximately 2 weeks to approximately 6 weeks.
- 15. (Previously presented) The methods described in Claim 2, wherein the cells are DT40 culture cells.
- 16. (Currently amended) A method for producing an antibody which can bind to a target antigen, comprising:
  - enhancing DNA homologous recombination at an antibody locus in chicken-derived B cells in which <u>cells</u> DNA homologous recombination is occurring at said antibody locus by relaxing with a histone deacetylase inhibitor the chromatin[[c]] structure of chromosomes in said chicken-derived B cells, whereby diverse immunocytes are obtained;
    - ii) preparing said target antigen;
    - iii)ii) contacting said immunocytes with said target antigen;
  - iv)iii) selecting an immunocyte producing an antibody which can bind to said target antigen; and
    - +)iv) culturing said immunocyte.